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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/848,988	05/19/2004	Lawrence Tibor Greenstein	LOGRE-26,460	5975
25883	7590	05/16/2007		
HOWISON & ARNOTT, L.L.P. P.O. BOX 741715 DALLAS, TX 75374-1715			EXAMINER NGUYEN, HUNG T	
			ART UNIT 2612	PAPER NUMBER
			MAIL DATE 05/16/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	Application No. 10/848,988	Applicant(s) GREENSTEIN ET AL.	
	Examiner HUNG T. NGUYEN	Art Unit 2612	

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on July 14, 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-18, 21, 23-24, 29 & 31-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrell (U.S. 6,310,554) in view of Hed et al. (U.S. 6,232,882).

Regarding claim 1, Carrell discloses a portable weather detection (10) having alarm devices (86,100) [ figs.1-4, col.2, lines 17-34, line 66 to col.3, line 5, col.3, line 63 to col.4, line 20, line 64 to col.5, line 5 and lines 47-57 ] comprising:

- the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ figs.2-4, col.4, lines 1-20, col.5, lines 14-35 ];
- the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ fig.2, col.5, lines 15-50 ];

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- the alarm signals (86,100) communicate with the controller (44) & sensor (26) and will be activated when the severe weather is determined by the controller [ figs.2-4, col.5, lines 15-57 ].

The reference of Carrell does not specifically mention term as electromagnetic signals produced by lightning as claimed by the applicant.

However, Hed teaches a tomado detection system (1) which having at least two circuits (11,12), memory (14), CPU (13) may process and detect both electromagnetic signals produced by lightning strikes and tomadoes [ fig.1, col.1, lines 6-12 and col.2, lines 46-49 and col.3, lines 17-30, col.4, lines 29-36 and col.9, lines 39-56 ].

Therefore, it would have been obvious to one having ordinary skill in the art to utilize the teaching of Hed in the system of Carrell for receiving & detecting only the electromagnetic signals caused or produced by lightning and tomadoes.

Regarding claim 2, Carrell discloses the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ figs.2-4, col.4, lines 1-20, col.5, lines 14-35 ]; and

Hed teaches a tomado detection system (1) which having at least two circuits (11,12), memory (14), CPU (13) may process and detect both electromagnetic signals produced by lightning strikes and tomadoes [ fig.1-2, col.1, lines 6-12 and col.2, lines 46-49 and col.3, lines 17-30 and col.9, lines 39-56 ].

Regarding claims 3-5, Hed teaches employs low frequency in the range of from 50 to 150 KHz in the detection system to detect electromagnetic signals produced by lightning strikes [ fig.1-2, col.9, lines 39-56 ].

Regarding claims 6-9, Carrell discloses the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ fig.2, col.4, lines 1-20, col.5, lines 14-35 ]; and

Hed teaches the tornado detection system (1) which having at least two circuits (11,12), memory (14), CPU (13) may process and detect both electromagnetic signals produced by lightning strikes and tornadoes [ fig.1-2, col.1, lines 6-12 and col.2, lines 46-49 and col.3, lines 17-30 and col.9, lines 39-56 ].

Regarding claims 10-12, Carrell discloses the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ fig.2, col.4, lines 1-20, col.5, lines 14-35 ];

- the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ fig.2, col.5, lines 15-50 ].

Regarding claim 13, Carrell discloses the portable weather detection (10) having a power supply / battery (70) [ fig.2, col.5, lines 8-11 ].

Regarding claims 14-15, Carrell discloses the portable weather detection (10) having a power supply / battery (70) with sleep mode / low power mode for saving energy [ fig.4, col.5, lines 20-26 ].

Regarding claims 16-18, Carrell discloses the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ figs.2-4, col.5, lines 15-50 ]; and

- the alarm signals (86,100) communicate with the controller (44) & sensor (26) and will be activated when the severe weather is determined by the controller [ figs.2-4, col.5, lines 15-57 ].

Regarding claim 21, Carrell discloses the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ fig.2, col.4, lines 1-20, col.5, lines 14-35 ];

- the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ figs.3-4, col.5, lines 15-50 ];

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Regarding claims 23-24, Carrell discloses the portable weather detection (10) having a port to allow the device to interface with a computer [ col.3, lines 6-8 ].

Regarding claim 29, Carrell discloses the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ figs.2-4, col.5, lines 15-50 ];

- the alarm signals (86,100) communicate with the controller (44) & sensor (26) and will be activated when the severe weather is determined by the controller [ figs.2-4, col.5, lines 15-57 ].

Hed teaches the tomado detection system (1) which having at least two circuits (11,12), memory (14), CPU (13) may process and detect both electromagnetic signals produced by lightning strikes and tornadoes [ fig.1-2, col.1, lines 6-12 and col.2, lines 46-49 and col.3, lines 17-30 and col.9, lines 39-56 ].

Regarding claim 31, Carrell discloses a weather detection (10) having alarm devices (86,100) [ figs.1-4, col.2, lines 17-34, line 66 to col.3, line 5, col.3, line 63 to col.4, line 20, line 64 to col.5, line 5 and lines 47-57 ] comprising:

- the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ figs.2-4, col.4, lines 1-20, col.5, lines 14-35 ];

- the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ fig.2, col.5, lines 15-50 ];
- the alarm signals (86,100) communicate with the controller (44) & sensor (26) and will be activated when the severe weather is determined by the controller [ figs.2-4, col.5, lines 15-57 ].

The reference of Carrell does not specifically mention term as electromagnetic signals caused by lightning as claimed by the applicant.

However, Hed teaches a tornado detection system (1) which having at least two circuits (11,12), memory (14), CPU (13) may process and detect both electromagnetic signals produced by lightning strikes and tornadoes [ fig.1, col.1, lines 6-12 and col.2, lines 46-49 and col.3, lines 17-30, col.4, lines 29-36 and col.9, lines 39-56 ].

Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Hed in the system of Carrell for receiving & detecting only the electromagnetic signals caused or produced by lightning & tornadoes.

Regarding claim 32, Hed teaches employs low frequency in the range of from 50 to 150 KHz in the detection system to detect electromagnetic signals produced by lightning strikes [ fig.1-2, col.9, lines 39-56 ].



Regarding claims 33-36, Carrell discloses the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ fig.2, col.4, lines 1-20, col.5, lines 14-35 ];

- the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ fig.2, col.5, lines 15-50 ];

Hed teaches the tomado detection system (1) which having at least two circuits (11,12), memory (14), CPU (13) may process and detect both electromagnetic signals produced by lightning strikes and tornadoes [ fig.1, col.1, lines 6-12 and col.2, lines 46-49 and col.3, lines 17-30, col.4, lines 29-36 and col.9, lines 39-56 ].

Regarding claims 37-38, Carrell discloses the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ figs.2-4, col.5, lines 15-50 ]; and

- the alarm signals (86,100) communicate with the controller (44) & sensor (26) and will be activated when the severe weather is determined by the controller [ figs.2-4, col.5, lines 15-57 ].

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Regarding claim 39-44, Carrell discloses the weather detection (10) having alarm devices (86,100) [ figs.1-4, col.2, lines 17-34, line 66 to col.3, line 5, col.3, line 63 to col.4, line 20, line 64 to col.5, line 5 and lines 47-57 ];

- the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ figs.2-4, col.4, lines 1-20, col.5, lines 14-35 ];

- the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ fig.2, col.5, lines 15-50 ];

- users may recognize the type of weather condition when he or she look at the graph of severe weather pressure data and know timely for seeking shelter [ figs.3-4, col.3, lines 9-12, col.5, lines 28-50 ].

3. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrell (U.S. 6,310,554) in view of Hed et al. (U.S. 6,232,882) further in view of Pabst et al. (U.S. 6,164,130).

Regarding claims 19-20, The reference of Carrell & Hed do not specifically mention a temperature as claimed by the applicant.

However, Pabst teaches a meteorological electromagnetic measuring system having temperature sensor [ col.4, lines 33-37 ].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Hed & Pabst includes a temperature sensor in the system of Carrell for tracking the local environment weather as desired.

4. Claims 22, 25-28, 30 & 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrell (U.S. 6,310,554) in view of Hed et al. (U.S. 6,232,882) further in view of Smith (U.S. 6,351,218).

Regarding claim 22, The reference of Carrell & Hed do not specifically mention a compass for directions as claimed by the applicant.

However, Hed teaches directional loop antenna to determine the path and direction of an incoming tornado [ col.3, lines 63-67 and col.4, lines 29-36 ].

Furthermore, Smith teaches an apparatus for activating weather warning devices (301-308) which having a display / computer screen (300) for showing directions of the storm in the region [ fig.3, col.2, lines 8-18, col.5, lines 55-66 ].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Hed & Smith in the system of Carrell for tracking directions of the storm or severe weather.

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Regarding claims 25-27, The reference of Carrell & Hed do not specifically mention a digital device which can be computer, PDA, or cellular phone as claimed by the applicant.

However, Smith teaches an apparatus for activating weather warning devices as (201, 202), cellular phone (218), hand held device as Palm Pilot and (301-308) which having a display / computer screen (300) for alerting device users that the storm is approaching to the region [ figs.2B, 3, col.3, lines 38-50, col.4, lines 36-67, col.5, lines 55-66 ].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Hed & Smith in the system of Carrell for warning to the user by multi electronic devices in the remote location by wireless signal.

Regarding claims 28 & 45, Smith teaches the apparatus for activating weather warning devices (301-308) which having a screen monitor for displaying / computer screen (300) may include the GPS system for showing location & positioning signal [ fig.2, col.3, lines 44-50 and col.4, lines 56-64 ].

Regarding claims 30 & 46-47, Smith teaches the apparatus for activating weather warning devices (301-308) which having a screen monitor / computer screen (300) may communicate with National Weather Service [ col.4, lines 22-35 and col.7, lines 1-8 ].

### Arguments & Responses

5. Applicant's argument filed on July 14, 2006 have been fully considered but they are moot in view of the new ground(s) of rejection.

Hed teaches a tornado detection system (1) which having at least two circuits (11,12), memory (14), CPU (13) may process and detect both electromagnetic signals produced by lightning strikes and tornadoes [ fig.1, col.1, lines 6-12 and col.2, lines 46-49 and col.3, lines 17-30, col.4, lines 29-36 and col.9, lines 39-56 ]; and

Hed teaches employs low frequency in the range of from 50 to 150 KHz in the detection system to detect electromagnetic signals produced by lightning strikes [ fig.1-2, col.9, lines 39-56 ].

### Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP j 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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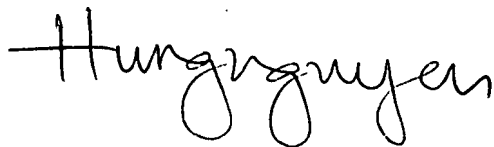
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung T. Nguyen whose telephone number is (571) 272-2982. The examiner can normally be reached on Monday to Friday from 9:00 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wu, Daniel can be reached on (571) 272-2964. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

**HUNG NGUYEN**  
**PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read 'Hung T. Nguyen', with a stylized, cursive script.

Examiner: Hung T. Nguyen

Date: May 13, 2007